

Washington's Energy Strategy: An Invitation to Action

Recommendations to help chart the state's energy future were presented to the Washington state legislature in a 1993 report prepared by a governor-appointed committee. This fact sheet highlights the report's major areas of discussion and concludes with a summary of the specific recommendations for action. The Washington Energy Policy Group is the lead agency for implementing Washington's Energy Strategy.

Highlights

- [Why a State Strategy?](#)
- [Major Areas of Discussion](#)
- [Specific Recommendations for Action](#)
 - [Transportation](#)
 - [Energy for Buildings, Farms, Industry](#)
 - [Environment](#)
 - [Energy Facilities Siting](#)
 - [Role of State Energy Office](#)
- [Guiding Principles and Recommendations](#)
- [Washington Energy Strategy Committee](#)

Why a State Strategy?

Energy costs the citizens and business of Washington \$9.3 billion a year. That's a larger part of Washington's economy than forest products and more than twice the size of the state's agricultural or fishing industries. Energy's multi-billion dollar price tag makes it one of the key factors that define the state's economic opportunities. In addition, we will likely see a \$5-\$8 billion investment in Washington state's energy sector in the next decade. These funds will be needed in a number of areas, primarily to achieve more conservation, develop renewable resources, and expand natural gas pipeline capacity. These cost-effective steps will help ensure adequate energy for the future, while providing economic opportunities today.

In 1991, the Washington Energy Strategy Committee, authorized by the legislature and appointed by the governor, began its task of developing a comprehensive statewide energy strategy. At that time, the region's electricity surplus had been exhausted; the transportation system was approaching gridlock; petroleum use was rising; and a growing population combined with efforts to protect endangered salmon species were testing the capacity of the hydroelectric system.

Over the last two years, the challenges for Washington's energy system have become greater. The Trojan nuclear power plant on the Columbia River has been shut down by its owners, and concerns have been raised about the cost-effectiveness of the WNP-2 nuclear plant at the Hanford Reservation. Potential stresses on transmission capacity, and the need to protect other Columbia River fish may require major new investments in conservation, fish and wildlife programs, and transmission.

The Committee took great pains to develop an energy strategy that emphasizes jobs, economic well-being and environmental protection. Its recommendations rely on known cost-effective technologies, beginning with improved efficiency, renewable resources, and wise use of natural gas. The Committee felt strongly that many options need to be pursued simultaneously to solve energy problems.

The Committee estimates that per capita energy use can be reduced by 10 to 20 percent, if recommendations are fully implemented in all sectors--commercial, industrial, residential, and transportation. This would reverse a recent trend of rapid energy growth. Estimates also suggest that doing so will keep increases in energy costs at or below the level of inflation. Finally, the actions will eliminate at least two-thirds of the state's projected growth in carbon dioxide emissions.

Major Areas of Discussion

The strategy includes a wide ranging discussion that provides a complete picture of Washington's energy situation. The major topics are briefly outlined below.

Transportation Challenges

Over the last decade, the number of vehicle miles traveled in Washington shot up more than two-and-a-half times the rate of population growth. The state faces the challenge of meeting demand for transportation services while at the same time minimizing congestion, environmental impacts, and growing dependence on petroleum fuels.

In 1991, federal legislation--the Intermodal Surface Transportation Efficiency Act (ISTEA)--shifted emphasis from constructing highways to developing a transportation system that promotes energy efficiency, rural development and environmental protection, and reduces congestion and pollution. The Act has created more flexibility in transportation funding, and requires states to spend ISTEA dollars in ways that reduce congestion and energy use and improve air quality. It also provides a real opportunity for Washington State to develop a transportation system that better serves the public and is more energy efficient. To take advantage of this opportunity, Washington needs to build a transportation planning process that is integrated, comprehensive, and aimed at the right target.

While integrated planning is a key to long-term transportation improvements, action cannot await development of a perfect plan. The Committee made specific recommendations on changing the way people travel; developing substitutes for energy consumption; using alternative fuels; and improving the efficiency of freight and vehicle transportation.

Energy for Buildings, Farms, and Industry

Natural Gas: Washington relies chiefly on natural gas from Canada and the Rocky Mountain region. Gas has become cheap and plentiful, but this does not mean it solves all problems. Washington State must be concerned about price, pipeline capacity, reliability, and growth in demand.

The Committee recommends making gas more available for use directly in residential space and water heating. This is more efficient than using gas to generate electric power for the same functions. To emphasize efficient use of gas, cost-effective conservation programs developed and implemented by natural gas utilities are important. Careful assessment of cost-effective fuel choice and expanding the availability of gas may aid in solving our energy problems.

Electricity: For at least a decade, the Pacific Northwest electric system has had a surplus of power. Our ability to sell surplus power has kept the cost of electricity low. The state faces a need for immediate and deliberate action to ensure a continued adequate, reliable and low-cost supply of electricity.

The challenges facing the electricity system will require timely development of a number of new resources; conservation and efficiency, renewable energy resources, cost-effective fuel substitution, and some gas-fired generation.

The Committee feels strongly that action is called for now. The Strategy is based on moving forward on all of these new resources, rather than focusing on just one.

Protecting Our Environment

Environmental problems and their solutions are closely tied to how we develop and use energy. As the Committee developed recommendations for electricity, gas, and petroleum policy, it examined the many interactions between energy and environmental policy. The strategy calls for numerous actions that will contribute to greenhouse gas emissions stabilization. The goals and programs that have been identified can reduce the growth in carbon dioxide releases by between half and two-thirds by 2010. This reduction will require effective implementations of the many actions in the strategy. If the state grows less rapidly or we identify further opportunities, we can expect even greater results.

The Committee charged the Washington State Energy Office (WSEO) with identifying additional actions on greenhouse gases that might reduce emissions further. The Committee also believes that our Congressional delegation should support a national CO2 and greenhouse emission target. It also recommends that the state's environmental regulators emphasize the use of creative market-based strategies to achieve environmental objectives at least cost with maximum choice.

Siting Energy Facilities

Siting energy facilities has never been easy. In the state of Washington, siting is not a coordinated process. All layers of government--local, state, and federal--may be involved in siting a particular facility. Each agency sets its own schedule for review and may include in its review the same issues raised--and potentially resolved--by others.

Siting process for energy facilities need to address five points: the need for the facility; safety and health impacts; environmental impacts; economic impacts; and alternatives to the proposed approach.

The Committee agreed that, in the near term, it is of paramount importance to make existing rules and procedures function as smoothly as possible. There is considerable opportunity to improve the permitting process without any new legal authority.

Public Awareness and Education

Increasing public understanding about energy is a common theme throughout the strategy. The Committee's recommendations strongly endorse more learning opportunities for K-12 students, better and more information for all citizens, and new programs in our technical colleges and universities that will train people for emerging or expanding careers in the energy field.

Specific Recommendations for Action

Transportation

Least-cost planning

- Washington State Department of Transportation (WSDOT) should establish a least-cost planning process that:
 - specifies the goals of the transportation system and objective measures for each goal.
 - fairly evaluates the costs of both demand-side and supply-side options.
 - integrates planning for different modes of travel.
 - selects a mix of options designed to meet overall system goals at the lowest cost to society.
 - involves appropriate agencies with environmental, energy, and land use expertise.
 - involves the public.

Changing the ways people travel

- The state should make cost-effective investments to improve the rail system for greater use in the Vancouver, B.C., to Portland corridor.
- The state should complete construction of Puget Sound Area HOV lanes; arterial connections to the system; ramp access; and the parking, pedestrian, and bicycle access necessary for bus and vanpool use.
- WSEO should promote successful implementation of the Commute Trip Reduction Law, encouraging employer and employee use of transportation demand management.
- WSDOT, cities, and counties should provide opportunities for safer and more accessible bicycle and foot transportation directly into core city areas.
- WSDOT should develop a specific proposal for congestion pricing pilot program, whereby users of highways would be charged during peak period.

Developing substitutes for transportation

- The Washington Utilities and Transportation Commission (WUTC) should work with WSEO to assess the long-term ability of communications technology to substitute for transportation.
- The state should encourage the establishment of centralized "telework centers" in urban and suburban areas.
- The state should locate significant state office facilities in non-metropolitan areas, using telecommunications to provide needed information links.
- The state should develop a model telecommuting program and policies that could be adapted by government agencies and the private sector.
- The Department of Information Services (DIS) should continue to work with public and private organizations to develop video conferencing as an alternative to travel.
- The WUTC and telecommunications companies should consider tariffs to encourage widespread access to services providing simultaneous transmission of voice and data.

Using alternative fuels

- The department of Ecology and General Administration and WSEO should work together to ensure that current state purchasing requirements for clean-burning vehicles fit federal mandates.
- The state should develop the infrastructure necessary for alternative fuel experiments and WSEO should track those experiments.
- The public should be advised on conversions of private vehicles to specific alternative fuel only when results of alternative fuel experiments are clearly known.
- The Department of Ecology should develop emissions performance standards for alternative fuel vehicles.
- WSEO, WSDOT, and the Department of Revenue should better define "alternative fuels" and establish a clearer basis than now exists for differential tax treatment.
- WSEO and Ecology should explore the development of a cooperative West Coast (British Columbia, Washington, Oregon, and California) effort to ensure maximum learning, minimal duplication of effort, and development of a larger market for low-emission vehicles.

Improving freight mobility

- The WUTC should work to improve the energy efficiency of the trucking industry by developing regulatory mechanisms that promote cost-effective and efficient use of fuel.
- The state should revitalize the state rail abandonment program to avoid further railroad right-of-way losses and, where appropriate, purchase and preserve abandoned rights-of-way for use as transportation corridors.
- WSDOT should examine ways to promote broader use of rail freight options.

Improving vehicle efficiency

- The state should seek our congressional delegation's support for increased federal Corporate Average Fuel Efficiency (CAFE) standards.
- The state should propose that the western states expand purchasing consortia to include vehicle fleet purchases, with the aim of stimulating auto manufacturers to develop safe, higher-mileage, and lower-emission vehicles.
- The Department of Revenue and Licensing and WSEO should develop a proposal for the 1994 legislative session to change the current license registration and excise tax system, so that it charges less for vehicles with better mileage/emissions performance and more for vehicles with poor performance.

Funding alternatives

- The state should examine all transportation funds and reprogram the funds to promote efficiency goals.
- The state should realign existing taxes to reinforce policy goals, particularly to ensure that tax structures do not provide incentives to increase vehicle miles traveled, increase emissions, or decrease vehicle efficiency.
- The state should take advantage of available federal funds for developing new programs or technologies.
- The state should raise new revenue by taxing the commodity or activity causing the problem. Revenue alternatives that merit consideration include: raising the fuel tax, extending the sales tax to sale of vehicle fuels, repealing tax exemptions for alternative fuels, and repealing the 18th Amendment to the state constitution so that existing gas tax money may be used for other transportation needs besides highways.

Growth planning for energy efficiency

- WSDOT and WSEO should jointly develop a technical assistance program that demonstrate energy implications of different growth planning strategies.
- WSEO should work with other interested parties to develop models for planners that demonstrate energy implications of alternative urban designs, should work with local governments to enact solar access ordinances, and should advocate comprehensive plans that preserve opportunities for efficient renewable energy projects.

Energy For Building, Farms, Industry

Natural gas planning

- The state's gas utilities should work closely with WSEO and WUTC to develop and implement comprehensive least-cost planning.
- Gas utilities should implement cost-effective conservation measures and programs in their service territories consistent with their least-cost plans.
- The state's electric and gas utilities should work closely with WSEO and the WUTC to integrate their least-cost planning.
- WSEO--in cooperation with the WUTC, utilities, the Bonneville Power Administration (BPA), and the Northwest Power Planning Council (NWPPC)--should provide a report to the governor and legislature clearly identifying the nature and extent of savings available from cost-effective fuel choice.
- WUTC should change its line extension policy to develop new pricing methods to permit recovery of costs from lower volume lines.
- The state should encourage electric utilities to consider fuel choice as a resource in their least-cost planning and to implement appropriate programs.
- The state should encourage BPA to review its new experiment fuel choice program and refine it where it can be shown that fuel choice is cost effective and reduces the need to use gas for electricity generation.
- The state's gas and electric utilities should provide clear information to support cost-effective fuel choices.

Gas policy and siting

- WSEO--in coordination with the state's electric and gas utilities and customers--should develop regular statewide estimates of natural gas use.
- WSEO and the Department of Natural Resources (DNR) should closely monitor coal bed methane to determine its potential as an indigenous gas supply that could be developed without new interstate pipeline capacity.
- WSEO should develop ways to track the efficiency of natural gas use in the state.

Conservation in use of electricity

- The state should support the aggressive pursuit of all cost-effective conservation and efficiency opportunities in both public and private utility markets.
- The state should support the effort to develop and implement regulatory approaches that align private utilities' financial interests with the successful implementations of their least-cost plans.
- BPA should develop better incentives and market conditions to ensure the successes of conservation investments in service areas of public utilities--both larger utilities in major urban growth areas and smaller utilities in slow-load growth areas.
- The state should regularly revise state commercial and residential building codes to achieve the region's conservation targets.
- BPA and the investor-owned gas and electric utilities should cooperate in the development of a set of standard and uniform principles for evaluating cost effectiveness and verifying the performance of BPA and utility-financed conservation measures.
- The state and region should take full advantage of all federal funds available for supporting conservation "technology transfer" and demonstration.
- The State Board for Community and Technical Colleges and the Higher Education Coordinating Board should develop curricula and provide training and certification programs for energy-related specializations.
- The state should vigorously pursue programs that ensure that public buildings are constructed and operated to use energy efficiently.

Improving system efficiencies

- The state should support cooperative multi-state analyses of the opportunity for greater seasonal electricity exchanges along the Pacific Coast.
- BPA should improve policies to boost access to interstate transmission lines and should examine shared ownership options.
- The U.S. Bureau of Reclamation and the U.S. Army Corps of Engineers should include turbine efficiency improvements in their budgets and promptly implement measures, in view of rising regional power demand and the low cost and impact of these resources.

Renewable energy sources

- Utilities and BPA should experiment with targeted solicitations for renewable resources that are nearly competitive with gas.
- The Power Council, BPA, WUTC, and utilities should move quickly to improve their ability to evaluate the full range of benefits from renewable energy technologies.
- The state should consider renewable energy projects, such as wind turbines suitable on parcels of land designated as range land or open space.

Non-utility fuels

- The state should support wide dissemination to homeowners and building operators of information describing practical opportunities to improve the efficiency of buildings using petroleum, coal, and wood.
- The state should support actions to improve efficiency in the use of non-utility fuels in public buildings.

Low-income assistance

- The state should support funding that addresses the energy needs of low-income citizens.
- The Department of Community Development (DCD) should work with WSEO, the Office of the Attorney General, and electric and gas utilities to ensure that low-income weatherization programs address energy savings for the largest number of low-income citizens possible.

Energy education

- The state should support education activities that increase the energy literacy of Washington citizens.
- The legislature should provide funds to the Superintendent of Public Instruction (SPI) to produce the second phase of the "Energy, Food, and You" curriculum.
- WSEO should survey utilities and building operators and advise the Higher Education Coordinating Board about what program should be developed to train technicians and system operators for conservation and efficiency work in the residential, commercial, and industrial sectors.
- The state's universities should examine their engineering and architecture programs to ensure that tomorrow's professional graduates are prepared to design facilities of all kinds with energy use in mind.
- Higher education programs should include energy education units in pre-service teacher training.

Environment

Carbon dioxide and global warming

- WSEO should develop a more comprehensive inventory and projection of carbon dioxide and other greenhouse gas emissions and identify the most cost-effective measures for meeting emission targets.
- The state should urge our Congressional delegation to support a national carbon dioxide and greenhouse gas emission target.

Environmental regulation and energy decision making

- BPA and the state's electric utilities should incorporate quantifiable costs, including environmental costs, into least-cost planning and modeling.
- The state encourages more comprehensive assessment of environmental costs in all energy sectors, not just electricity planning.

Energy Facilities Siting

- The new governor should instruct his cabinet to focus its attention on implementing the provisions of the state energy strategy using existing rules, but avoiding costly duplication and ensuring rapid decision making.
- WSEO should take the lead in ensuring that supply and conversation projects consistent with the strategy receive fair and rapid treatment by the many state, federal, and local agencies that must review them.
- BPA and investor-owned utilities should consider funding generic impact investigations, particularly for renewable technologies, so as to narrow the number of issues requiring study during actual siting.
- The legislature should form a siting review panel, similar to the State Environmental Policy Act Review Panel of 1982-83, to develop revised state siting procedures and legislation to implement them.

Role of State Energy Office

- WSEO should improve and realign current programs to fit the energy strategy.
- WSEO should play a leadership role in state government to support the development of new energy resources that are consistent with the strategy.
- WSEO should take a supportive role with other state agencies, local governments, schools, and others to integrate energy issues in their plans and decisions.
- WSEO should conduct a number of studies, track certain technological changes, and prepare a number of reports that will provide for timely and informed future decisions concerning energy.

Guiding Principles and Recommendations

The Washington Energy Strategy Committee represented a broad base of views, including local government, business and industry, the environmental community, electric and gas utilities, and petroleum suppliers. The members agreed to the following set of common principles and objectives to guide their thinking and decision making.

- Implement all cost-effective energy conservation.
- Implement cost-effective energy policies that minimize environmental damage.
- Use sound scientific data and analysis as the basis for energy policy.
- Foster mutually beneficial relationships with nearby states and provinces to help accomplish Washington's energy goals.
- Use market forces--including fair competition and consumer choices--where possible, along with clear, fair rules and laws to accomplish our objectives.
- Respond creatively and prospectively to political, social, and environmental changes affecting the use and supply of energy.
- Maintain programs that ensure that all citizens, including those on small incomes, have access to such basic energy services as heating, lighting, and mobility.
- Lead by example with energy efficiency in state and local government operations.
- Cultivate diversity in energy supply, including new technologies and renewable resources such as wind, geothermal, hydro, biomass, and solar technologies, where a modest initial investment can help develop cost-effective resources.
- Ensure broad participation by the state's citizens in the Strategy and provide information and education to enhance understanding.

Washington Energy Strategy Committee

Chair:	
Jim Waldo, Attorney <i>Gordon Thomas Honeywell</i>	
Committee Members:	
Neil Amundson <i>Senator Washington State Senate</i>	Ted Bottiger <i>Washington Member Northwest Power Planning Council</i>
Dick Casad <i>Commissioner Utilities and Transportation Commission</i>	Ted Coates <i>Director, Energy Resource Planning Seattle City Light</i>
David Cooper <i>Representative Washington State House of Representatives</i>	Ray Corpuz, Jr. <i>Manager City of Tacoma</i>
T. James Davis <i>Commissioner Public Utility District No. 1 of Douglas County</i>	K.C. Golden <i>Executive Director Northwest Conservation Act Coalition</i>
Robert R. Golliver <i>President Washington Natural Gas Company</i>	Wanda Haas <i>Former President League of Women Voters of Washington</i>
Nancy Holbrook <i>Energy Committee Chair Washington Environmental Council</i>	Ronald J. Kiracofe <i>Refinery Manager Arco Products Company</i>
Corey Knutsen <i>Vice President, Corporate Planning Puget Sound Power & Light Company</i>	Pat Mummey <i>Commissioner Spokane County</i>
Keith Prehm <i>CSM, General Manager Bellevue Square/Bellevue Properties</i>	Bob Waldo <i>Chair Energy Facility Site Evaluation Council</i>
Carl West <i>Energy Supply Manager Weyerhaeuser Company</i>	David A. White <i>Manager, Market Development Northwest Pipeline Corporation</i>
Martin Wistisen <i>President Agri-Northwest</i>	

The Committee also relied on the citizen input to formulate its recommendations. Citizens from across the state made their opinions known during a series of public meetings held August-September 1992.